

Fractal Energy Theory – Minh Malcolm Hai Nguyen

Introduction

The Fractal Modular Energy Unit (FMEU) unites WiFi-based signal propagation with recursive energy storage. The theory emerged from the idea that energy can be both transmitted and nested in a modular, fractal form.

Evolution of the Concept

WiFi cards operate in harmonic frequency bands, while battery cards store static energy. Their convergence allows each energy unit to become a transmitter, receiver, and capacitor simultaneously. This transforms the system into a recursive energy network.

Mathematical Foundation

Let F_s = signal frequency, C_r = recursive capacitance, G_n = number of generations, and ϕ (phi) = golden ratio \approx

Fractal Energy Equation:

$$E_f = \sum (F_s \times C_r \times \phi^n) \text{ from } n = 1 \text{ to } G_n$$

This equation models the system as an expanding recursive field. Each node compounds energy geometrically—mirroring organic growth seen in leaves, neurons, and galaxies.

Design Progression

1. Fractal Capacitor Layering – energy cells follow golden ratio scale.
2. WiFi-Control Layer – responds to ambient signals for activation.
3. Frequency Bloom Shell – outer casing expands/contracts with load.

Conclusion

This optimized theory forms both the mathematical foundation and design map for a new class of responsive, fractal-based energy systems. The next step is the visual schematic for the FMEU design.

Document prepared by: Minh Malcolm Hai Nguyen – May 10, 2025